



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/053,496 | 11/09/2001 | Fong Piau | FLEX1814 | 3412 |

7590 05/22/2003
PENINSULA IP GROUP
2290 North First Street, Suite 101
San Jose, CA 95131

EXAMINER

INOA, MIDYS

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2188

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/053,496

Applicant(s) *PRG*

PIAU ET AL.

Examiner

Midys Inoa

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application):
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings filed on November 9th, 2001 have been accepted by the Examiner.

Specification

2. The disclosure is objected to because of the following informalities:

On Page 8, line 14, the phrase "by the by the" should be "by the".

On Page 8, line 12, it is unclear what "Figure 3" the specification refers to since the Figures are numbered as 3a, 3b, 3c, etc and there is no instance of a Figure 3.

Appropriate correction is required.

Claim Objections

3. Claims 1-5 and 7-8 objected to because of the following informalities:

Regarding Claim 1, on line 13, the phrase "used for to transfer" should be "used to transfer" and on lines 10-11, the phrase "the parameters of the configuration information table..." should be "parameters of a configuration information table..."

Regarding Claim 2, on line 1, the word "the" should be added in between the words "of" and received; on line 3, the phrase "address information" seems to be unnecessary.

Regarding Claim 3, on line 2, the phrase "transfer of data" should be "transfer data"; on line 3, the phrase "address information" seems to be unnecessary.

Regarding Claim 4, line 3, the phrase "writes data" should be "write data".

Regarding Claim 5, line 3, the phrase "reads data" should be "read data".

Regarding Claim 7, lines 2, the word "for" should be added in between the words "waiting" and "a".

Art Unit: 2188

Regarding Claim 8, lines 1, the phrase "if the" is unnecessary.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (US 2003/0009607 A1) in view of Kuo et al. (2002/0010828 A1).

Regarding Claim 1, 9, and 17 Chen teaches a flash system that is controlled by a flash controller 204 in which the controller control and initiates the functionality of the system components, processes a series of commands such as write or read, and executes transfers of data from and to the flash ROM (Page 3, paragraphs 0028-0030). Chen does not teach a flash memory comprising of a number of flash memory arrays or the partitioning of the flash memory arrays. Kuo et al. teaches a flash memory system with a bank architecture (flash memory arrays) in which a bank selector identifies banks to be part of an upper or lower partition (partitioning of flash memory arrays, Page 8, paragraph 0071). It would have been obvious to one of ordinary skill in the art at the time the invention was made to integrate the partitioning method if Kuo et al. with the system of Chen in order to allow the system to sort data by type within the flash memory through the creation of partitions.

Regarding Claims 2-3, 10-11, and 18-19, Chen teaches a system in which there is a choice as to what interface to use for the movement of data. When the system is in a flash ROM

Art Unit: 2188

programming mode, an IDE interface is used. When the system is dealing with task files, an ATA interface is in effect (“an ATA or IDE interface is selected”, Page 2, paragraph 0019).

Regarding Claims 4, 12 and 20, Chen teaches a system in which the host provides the flash controller with a write command (specified command sequence) which is interpreted by the controller (data transfer operative elements) and allows it to perform the necessary steps to write data from the controller into the flash ROM, thus completing the data transfer operation (Page 3, paragraph 0030).

Regarding Claims 5, 13 and 21, Chen teaches a system in which the host provides the flash controller with a read command (specified command sequence) which is interpreted by the controller (data transfer operative elements) and allows it to perform the necessary steps to read data from the flash ROM and store it in a RAM that is accessible to the host, thus completing the data transfer operation (Page 3, paragraph 0031).

Regarding Claims 6, 14, and 22, Chen teaches a system in which a “LENGTH” register specifies the number of bytes that need to be transferred, thus allowing the flash controller to continue the transfer operation until the system receives or transfers the specified number of bytes. This is how the controller knows that the operation has been completed (Page 3, paragraph 003, lines 15-16 and paragraph 0031, lines 8-9).

Regarding Claims 7-8, 15-16, and 23-24, Chen’s flash controller does not perform any write, read, or transfer operation until a command is received from the host. Therefore, essentially, the flash controller stops operation and waits for a request from the host before it resumes normal operation.


Art Unit: 2188

Conclusion

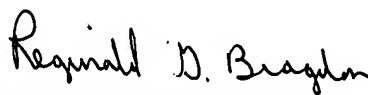
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Midys Inoa whose telephone number is (703) 305-7850. The examiner can normally be reached on M-F 7:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on (703) 305-3821. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7239 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


Midys Inoa
Examiner
Art Unit 2188

MI
May 19, 2003


REGINALD G. BRAGDON
PRIMARY EXAMINER